CLAIMS

1. A method for inducing a modification of a physiological variable of a user, comprising:

applying a first intervention via a device to the user responsive to a set of one or more intervention parameters;

measuring a physiological variable responsive to the first intervention;

transmitting a signal responsive to the physiological variable to a remote facility for processing;

receiving a reply from the remote facility responsive to the signal; and

applying a second intervention via the device to the user responsive to the reply.

2. A method according to claim 1, wherein the physiological variable is a variable representative of a biorhythmic activity of the user.

3. A method according to claim 1, wherein the physiological variable is changed as a direct consequence of at least one of the interventions.

4. A method according to claim 3, wherein applying the first intervention comprises instructing the user to voluntarily change the physiological variable.

5. A method according to claim 4, wherein instructing comprises instructing the user to modify a parameter of the user's breathing.

6. A method according to claim 1, wherein transmitting the signal comprises connecting the device to the remote facility via a distributed network.

7. A method according to claim 1, wherein transmitting the signal comprises connecting the device to the remote facility via a direct communication link.

8. A method according to claim 1, wherein the device comprises an industry-standard computer operating a program.

9. A method according to claim 1, wherein applying the intervention comprises providing an intelligible sensory stimulus to the user.

10. A method according to claim 1, wherein the remote facility comprises an industry-standard computer.

11. A method according to claim 1, wherein transmitting the signal comprises communicating a verbal message.

12. A method according to claim 1, wherein transmitting the signal comprises transmitting a set of data.

13. A method according to claim 1, wherein receiving the reply comprises receiving a verbal message.

14. A method according to claim 1, wherein receiving the reply comprises receiving a set of data.

15. A method according to claim 1, wherein the device comprises a comparator which compares a current physiological state of the user to a previous physiological state of the user, in order to determine a change in the physiological state responsive to the first intervention.

16. A method according to claim 1, wherein measuring the physiological variable comprises generating a diagnosis and modifying the set of one or more intervention parameters responsive to the diagnosis.

17. A method according to claim 1, wherein applying the first intervention comprises applying a routine intervention to the user at generally regular intervals.

18. A method according to claim 1, wherein applying the first intervention comprises applying the first intervention in a non-emergency setting.

19. A method according to claim 1, wherein the user has congestive heart failure.

20. A method according to claim 1, wherein the user is hypertensive.

21. A method according to claim 1, wherein the user is asthmatic.

22. A method according to claim 1, wherein the user has chronic obstructive pulmonary disease.

23. A method according to claim 1, wherein the user has cystic fibrosis.

24. A method according to claim 1, wherein measuring the physiological variable comprises assessing an indication of blood oxygenation.

25. A method according to claim 1, wherein the measuring the physiological variable comprises assessing an indication of cardiac electrical state.

26. A method according to claim 1, wherein measuring the physiological variable comprises assessing an indication of respiration of the user.

27. A method according to claim 1, wherein measuring the physiological variable comprises assessing an indication of blood pressure of the user.

28. A method according to claim 1, wherein the user is generally healthy.

29. A method according to claim 1, wherein applying the first intervention comprises applying the first intervention so as to reduce psychological stress of the user.

30. A method according to claim 1, wherein applying the first intervention comprises applying the first intervention so as to induce muscle re-education.

31. A method for inducing a modification of a physiological variable of a user, comprising:

providing an electronic game having a game parameter, the game to be played by the user;

applying an intervention via the game to the user responsive to the game parameter;

measuring a physiological variable responsive to the intervention; and

modifying the game parameter responsive to the measured physiological variable.

32. A method according to claim 31, wherein providing the electronic game comprises:

connecting the game to a remote facility;

transmitting the game parameter to the remote facility; and

transmitting the physiological variable to the remote facility.

33. A method according to claim 32, wherein connecting the game to the remote facility comprises receiving a response from the remote facility for the purpose of modifying the game parameter.

34. A method according to claim 32, wherein another user operates the method at the remote facility.

35. A method according to claim 31, wherein applying the intervention comprises applying the intervention such that the physiological variable is changed as an indirect consequence of the intervention.

36. A method according to claim 35, wherein measuring the physiological variable comprises assessing an indication of blood oxygenation.

37. A method according to claim 35, wherein measuring the physiological variable comprises assessing an indication of cardiac electrical state.

38. A method according to claim 31, wherein applying the intervention comprises applying the intervention such that the physiological variable is changed as a direct consequence of the intervention.

39. A method according to claim 38, wherein applying the intervention comprises influencing the user to voluntarily change the physiological variable.

40. A method according to claim 38, wherein influencing comprises influencing the user to modify a parameter of the user's breathing.

41. A method according to claim 40, wherein the user is asthmatic.

42. A method according to claim 40, wherein the user has chronic obstructive pulmonary disease.

43. A method according to claim 31, wherein the user has cystic fibrosis.

44. A method according to claim 31, wherein measuring the physiological variable comprises receiving a sound responsive to respiratory activity.

45. A method according to claim 44, wherein receiving the sound comprises receiving a wheezing sound.

46. A method according to claim 31, wherein measuring the physiological variable comprises receiving an indication of microvascular blood flow.

47. A method according to claim 31, wherein measuring the physiological variable comprises receiving an indication of the stiffness of at least one blood vessel.

48. A method for modifying a physiological variable of a user, comprising:

providing the user with an interventional device capable of modifying the variable responsive to an input from a remote facility;

enabling the device to operate during a time-limited period; and

enabling the device to operate after the time-limited period, responsive to a receipt of payment.

49. A method according to claim 48, wherein providing the user with the interventional device comprises facilitating the user and the remote facility to enter into an agreement regarding operation of the device.

50. A method according to claim 48, wherein the receipt of payment comprises a transfer of funds to the remote facility.

51. A method for enabling an intervention, comprising:

receiving a signal corresponding to a measured physiological variable of a remote user, the physiological variable having been measured responsive to a first intervention via a device; and

transmitting a reply responsive to the signal, to modify aspects of a second intervention applied via the device.

52. A method according to claim 51, wherein the physiological variable is a variable representative of a biorhythmic activity of the user.

53. A method according to claim 51, wherein receiving the signal comprises connecting the device to a local facility via a distributed network.

54. A method according to claim 51, wherein receiving the signal comprises connecting the device to a local facility via a direct communication link.

55. A method according to claim 51, wherein the device comprises an industry-standard computer operating a program.

56. A method according to claim 51, wherein transmitting the reply comprises communicating a verbal message.

57. A method according to claim 51, wherein transmitting the reply comprises transmitting a set of data.

58. A method according to claim 51, wherein receiving the signal comprises receiving a verbal message.

59. A method according to claim 51, wherein receiving the signal comprises receiving a set of data.

60. A method according to claim 51, wherein receiving the signal comprises generating a diagnosis responsive to the measured physiological variable of the remote user.

61. Apparatus for inducing a modification of a physiological variable of a user, comprising:

a sensor, adapted to generate a measure of the physiological variable of the user;

a stimulation unit, adapted to provide an intervention to the user; and

a device, adapted to be coupled to the sensor and the stimulation unit, and which is adapted to:

determine a set of one or more intervention parameters responsive to the measure of the physiological variable;

operate the stimulation unit responsive to the set of one or more intervention parameters;

transmit a signal responsive to the physiological variable to a remote facility for processing;

receive a reply from the remote facility responsive to the signal; and

apply the intervention via the stimulation unit to the user responsive to the reply.

62. Apparatus according to claim 61, wherein the physiological variable is a variable representative of a biorhythmic activity of the user.

63. Apparatus according to claim 61, wherein the stimulation unit is adapted to provide an intelligible sensory stimulus to the user.

64. Apparatus according to claim 61, wherein the device is adapted to be connected to the remote facility via a distributed network.

65. Apparatus according to claim 61, wherein the device is adapted to be connected to the remote facility via a direct communication link.

66. Apparatus according to claim 61, wherein the device comprises an industry-standard computer.

67. Apparatus according to claim 61, wherein the device is adapted to transmit the signal to an industry-standard computer at the remote facility.

68. Apparatus according to claim 61, wherein the device is adapted to transmit a verbal message to the remote facility.

69. Apparatus according to claim 61, wherein the device is adapted to transmit a set of data to the remote facility.

70. Apparatus according to claim 61, wherein the device is adapted to receive a verbal message from the remote facility.

71. Apparatus according to claim 61, wherein the device is adapted to receive a set of data from the remote facility.

72. Apparatus according to claim 61, wherein the device comprises a comparator and a memory, wherein the memory is adapted to intermittently store an indication of a physiological state of the user, and wherein the comparator is adapted to compare a current indication of the physiological

state to a previous indication of the physiological state, in order to determine a change in the user's physiological state.

73. Apparatus according to claim 61, wherein the stimulation unit comprises an industry-standard computer.

74. Apparatus for inducing a modification of a physiological variable of a user, comprising:

an electronic game adapted to be played by the user, so as to apply an intervention to the user responsive to a game parameter;

a sensor, adapted to measure a physiological variable of the user responsive to the user playing the game; and

a processor adapted to modify the game parameter responsive to the measured physiological variable.

75. Apparatus according to claim 74, wherein the processor is located at a facility remote from the user.

76. Apparatus according to claim 75, wherein another user plays a similar game at the remote facility.

77. Apparatus for enabling an intervention, comprising:

a receiver, located at a local facility, which is adapted to receive a signal corresponding to a measured physiological variable of a remote user, the physiological variable having been measured responsive to a first intervention via a device; and

a transmitter, located at the local facility, which is adapted to transmit a reply responsive to the signal, to modify aspects of a subsequent intervention applied via the device.

78. Apparatus according to claim 77, wherein the physiological variable is a variable representative of a biorhythmic activity of the user.

79. Apparatus according to claim 77, wherein the receiver is adapted to be connected to the device via a distributed network.

80. Apparatus according to claim 77, wherein the receiver is adapted to be connected to the device via a direct communication link.

81. Apparatus according to claim 77, wherein the receiver is adapted to receive the signal from an industry-standard computer which measured the physiological variable.

82. A method for generating music, comprising:

receiving a rhythm signal corresponding to a rhythm of a cyclic physiological activity of a user, the physiological activity having first and second activity phases thereof;

analyzing the rhythm signal to determine first and second durations thereof, respectively corresponding to the first and second activity phases;

determining first and second new durations responsive to desired changes of the first and second durations of the rhythm signal;

generating responsive to the new durations a music signal for presentation to the user, the music signal having first and second music phases thereof respectively corresponding to the first and second activity phases, a duration of each of the music phases expressible as being approximately equal to an integer multiple of a base duration, the integer multiple being less than or equal to four; and

directing the user to modify durations of the first and second activity phases responsive to the respective durations of the first and second music phases.

83. A method according to claim 82, wherein generating the music signal comprises setting the duration of one of the

music phases to be approximately equal to an integer multiple of the other one of the music phases.

84. A method according to claim 82, wherein directing the user to modify the durations comprises directing the user to attempt to perform the first and second activity phases of the physiological activity such that the respective durations thereof are substantially equal to the durations of the first and second music phases.

85. A method according to claim 82, wherein receiving the rhythm signal comprises receiving a motion signal corresponding to an activity of the user selected from the list consisting of: walking, jogging, and running.

86. A method according to claim 82, wherein receiving the rhythm signal comprises receiving a respiration signal corresponding to respiration of the user.

87. A method according to claim 86, wherein receiving the breathing signal comprises receiving an indication of a timing characteristic of inspiratory and expiratory phases of the respiration.

88. A method according to claim 82, wherein determining the new durations comprises determining the new durations responsive to a vasomotor frequency of the user.

89. A method according to claim 88, and comprising measuring a cardiovascular variable of the user and determining the vasomotor frequency responsive thereto.

90. A method for generating music, comprising:

receiving a rhythm signal corresponding to a rhythm of a cyclic physiological activity of a user, the physiological activity having first and second activity phases thereof;

analyzing the rhythm signal to determine first and second durations thereof, respectively corresponding to the first and second activity phases;

determining first and second new durations responsive to desired changes of the first and second durations of the rhythm signal;

generating responsive to the new durations a music signal for presentation to the user, the music signal having first and second music phases thereof respectively corresponding to the first and second activity phases, a duration of one of the music phases being approximately equal to an integer multiple of a duration of the other one of the music phases; and

directing the user to modify durations of the first and second activity phases responsive to the respective durations of the first and second music phases.

91. A method according to claim 90, wherein directing the user to modify the durations comprises directing the user to attempt to perform the first and second activity phases of the physiological activity such that the respective durations thereof are substantially equal to the durations of the first and second music phases.

92. A method according to claim 90, wherein receiving the rhythm signal comprises receiving a respiration signal corresponding to respiration of the user.

93. A method according to claim 90, wherein determining the new durations comprises determining the new durations responsive to a vasomotor frequency of the user.

94. A method according to claim 93, and comprising measuring a cardiovascular variable of the user and determining the vasomotor frequency responsive thereto.

95. A method for generating music, comprising:

receiving a rhythmic physiological pattern corresponding to a rhythm of a physiological activity of a user;

analyzing the rhythmic physiological pattern to determine an actual activity pattern thereof;

determining a new activity pattern responsive to a desired change of the actual activity pattern;

generating a music signal for presentation to the user, the music signal having two or more sets of notes, at least one of the sets of notes having a rhythmic characteristic corresponding to the new activity pattern; and

directing the user to modify the rhythm of the physiological activity responsive to the music signal.

96. A method according to claim 95, wherein directing the user comprises directing the user to modify the rhythm of the physiological activity to correspond to the rhythmic characteristic.

97. A method according to claim 95, wherein directing the user comprises playing at least part of the music signal.

98. A method according to claim 95, wherein directing the user comprises outputting a vocal message.

99. A method according to claim 95, wherein receiving the rhythmic physiological pattern comprises receiving a motion signal corresponding to an activity of the user selected from the list consisting of: walking, jogging, and running.

100. A method according to claim 95, wherein generating the music signal comprises varying a characteristic of the notes in one of the sets responsive to at least one of: the actual activity pattern and the new activity pattern.

101. A method according to claim 100, wherein varying the characteristic comprises varying a characteristic of an envelope parameter of the notes.

102. A method according to claim 95, wherein generating the music signal comprises generating the signal in accordance with the Musical Instrument Digital Interface (MIDI) standard.

103. A method according to claim 102, wherein generating the music signal comprises defining at least two of the sets of notes as being in distinct layers.

104. A method according to claim 95, wherein receiving the rhythmic physiological pattern comprises receiving a respiration signal corresponding to respiration of the user.

105. A method according to claim 104, wherein receiving the breathing signal comprises receiving an indication of a timing characteristic of inspiratory and expiratory phases of the respiration.

106. A method according to claim 95, wherein determining the new activity pattern comprises determining the new activity pattern responsive to a vasomotor frequency of the user.

107. A method according to claim 106, and comprising measuring a cardiovascular variable of the user and determining the vasomotor frequency responsive thereto.

108. A method according to claim 95, wherein generating the music signal comprises:

substantially not outputting the notes in at least one of the sets when the new activity pattern is characterized by a first rate; and

outputting the notes in the at least one of the sets when the new activity pattern is characterized by a second rate, which is slower than the first rate.

109. A method according to claim 108, wherein generating the music signal comprises:

substantially not outputting the notes in a second one of the sets when the new activity pattern is characterized by the second rate; and

outputting the notes in the second set when the new activity pattern is characterized by a third rate, which is slower than the second rate.

110. A method according to claim 109, wherein generating the music signal comprises substantially not outputting the notes in the at least one of the sets when the new activity pattern is characterized by the third rate.

111. A method for generating music, comprising:

receiving a rhythm signal corresponding to a rhythm of a cyclic physiological activity of a user;

analyzing the rhythm signal to determine a pattern thereof;

determining a new pattern responsive to a desired change of the pattern of the rhythm signal;

generating, responsive to the new pattern, a music signal for presentation to the user;

determining, responsive to a characteristic of the new pattern, a set of music layers to include in the music signal, the layers having notes, such that the notes of one of the layers are played at a generally faster rate than the notes of another one of the layers; and

directing the user to modify the rhythm of the physiological activity responsive to the music signal.

112. A method according to claim 111, wherein analyzing the rhythm signal to determine the pattern thereof comprises analyzing the rhythm signal to determine a characteristic frequency thereof, and wherein determining the new pattern comprises determining a new frequency responsive to a desired change of the frequency of the rhythm signal.

113. A method according to claim 111, wherein receiving the rhythm signal comprises receiving a respiration signal corresponding to respiration of the user.

114. Apparatus for facilitating improving health of a user, comprising:

a first sensor, adapted to measure a first physiological variable, which is indicative of a voluntary action of the user;

a second sensor, adapted to measure a second physiological variable, which is not entirely under the direct voluntary control of the user; and

circuitry, adapted to receive respective first and second sensor signals from the first and second sensors, and, responsive thereto, to generate an output signal which directs the user to modify a parameter of the voluntary action.

115. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal such that if the user modifies a parameter of the voluntary action responsive to the output signal, then the second physiological variable will be changed in a desired manner.

116. Apparatus according to claim 114, wherein the circuitry is adapted to: (a) generate the output signal to direct the user to modify the parameter of the voluntary action, (b) identify an aspect of the first sensor signal indicative of the user having modified the parameter to a desired extent, and (c) responsive to identifying the aspect of the first sensor signal, generate a new output signal, to direct the user to further modify the parameter of the voluntary action.

117. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to modify the parameter of the voluntary action, so as to

facilitate an improvement in congestive heart failure of the user.

118. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to modify the parameter of the voluntary action, so as to facilitate treatment of a blood pressure disorder of the user.

119. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to modify the parameter of the voluntary action, so as to facilitate an improvement in asthma of the user.

120. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to modify the parameter of the voluntary action, so as to facilitate an improvement in cystic fibrosis of the user.

121. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to modify the parameter of the voluntary action, so as to facilitate an increase in mechanical compliance of arteries of the user.

122. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to modify the parameter of the voluntary action, so as to facilitate an increase in oxygenation of tissue of the user.

123. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to modify the parameter of the voluntary action, so as to facilitate weaning the user from a mechanical ventilator.

124. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to modify the parameter of the voluntary action, so as to

facilitate reducing a duration of a post-surgery recover period of the user.

125. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to modify the parameter of the voluntary action, so as to facilitate reducing excessive sympathetic activity of the user.

126. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to modify the parameter of the voluntary action, so as to facilitate a modification of peristaltic activity of the user.

127. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to modify the parameter of the voluntary action, so as to facilitate a modification of vasomotor activity of the user.

128. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to modify the parameter of the voluntary action, so as to facilitate an increase of heart rate variability of the user.

129. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to modify the parameter of the voluntary action, so as to facilitate an increase of venous return to a heart of the user.

130. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to modify the parameter of the voluntary action, so as to facilitate a reduction of vasomotor tone of the user.

131. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to

modify the parameter of the voluntary action, so as to facilitate a reduction of airway resistance of the user.

132. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to modify the parameter of the voluntary action, so as to facilitate an increase of endurance of an expiratory muscle of the user.

133. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to modify the parameter of the voluntary action, so as to facilitate an increase of blood flow in capillaries of the user.

134. Apparatus according to claim 114, wherein the circuitry is adapted to generate the output signal to direct the user to modify the parameter of the voluntary action, so as to facilitate a reduction of pain experienced by the user.

135. Apparatus according to claim 114, and comprising a speaker, wherein the circuitry is adapted to drive the speaker to generate music, so as to direct the user to modify the parameter of the voluntary action.

136. Apparatus according to claim 114, and comprising a speaker, wherein the circuitry is adapted to drive the speaker to output natural sounds, so as to direct the user to modify the parameter of the voluntary action.

137. Apparatus according to claim 114, and comprising a screen, wherein the circuitry is adapted to drive the screen to display one or more patterns corresponding to the output signal, so as to direct the user to modify the parameter of the voluntary action.

138. Apparatus according to claim 114, wherein the second sensor comprises a blood pressure sensor.

139. Apparatus according to claim 114, wherein the second sensor comprises a photoplethysmographic sensor.

140. Apparatus according to claim 114, wherein the second sensor comprises a blood oximeter.

141. Apparatus according to claim 114, wherein the second sensor comprises an electrocardiographic sensor.

142. Apparatus according to claim 114, wherein the second sensor comprises an electroencephalographic sensor.

143. Apparatus according to claim 114, wherein the second sensor is adapted to measure heart rate of the user.

144. Apparatus according to claim 114, wherein the second sensor comprises an ultrasonic sensor, adapted to measure a cardiovascular variable.

145. Apparatus according to claim 114, wherein the second sensor is adapted to measure a pulsatile change of volume of blood in an artery of the user.

146. Apparatus according to claim 114, wherein the second sensor is adapted to measure a non-pulsatile change of volume of blood in an artery of the user.

147. Apparatus according to claim 114, wherein the second sensor is adapted to measure a pulsatile change of volume of blood in tissue of the user.

148. Apparatus according to claim 114, wherein the second sensor is adapted to measure a non-pulsatile change of volume of blood in tissue of the user.

149. Apparatus according to claim 114, wherein the second sensor is adapted to non-invasively measure blood viscosity of the user.

150. Apparatus according to claim 114, wherein the second sensor is adapted to measure the second physiological variable

so as to facilitate a determination of a characteristic of peristalsis of the user.

151. Apparatus according to claim 114, wherein the second sensor is adapted to measure the second physiological variable so as to facilitate a determination of arterial compliance of the user.

152. Apparatus according to claim 114, wherein the second sensor is adapted to measure the second physiological variable so as to facilitate a determination of pulse wave velocity of blood in blood vessels of the user.

153. Apparatus according to claim 114, wherein the second sensor is adapted to measure the second physiological variable so as to facilitate a determination of a vasomotor frequency of the user.

154. Apparatus according to claim 153, wherein the circuitry is adapted to set a frequency of the output signal responsive to the vasomotor frequency.

155. Apparatus according to claim 114, wherein the first sensor comprises a motion sensor.

156. Apparatus according to claim 155, wherein the first sensor is adapted to be coupled to a limb of the user and to generate the first sensor signal responsive to motion of the limb.

157. Apparatus according to claim 114, wherein the first sensor is adapted to measure a cyclic physiological variable of the user and to generate the first sensor signal responsive thereto, and wherein the circuitry is adapted to generate the output signal responsive to a desired change in a frequency of the cyclic physiological variable.

158. Apparatus according to claim 114, wherein the first sensor comprises a respiration sensor.

159. Apparatus according to claim 158, and comprising a belt adapted to be placed around a torso of the user, wherein the respiration sensor is adapted to generate the first sensor signal responsive to a change in circumference of the torso.

160. Apparatus according to claim 158, wherein the respiration sensor is adapted to measure a characteristic of the user's respiration so as to facilitate a determination of airway resistance of the user.

161. Apparatus according to claim 158, wherein the respiration sensor is adapted to measure a characteristic of the user's respiration so as to facilitate a determination of a mechanical load against which the user breathes.

162. Apparatus according to claim 158, wherein the circuitry is adapted to: (a) determine, responsive to the first signal, a current value of an Expiratory : Inspiratory (E:I) ratio of the user, (b) determine a desired final value of the E:I ratio, and (c) generate the output signal so as to direct the user to vary the user's E:I ratio from the current value thereof, through one or more intermediate values thereof, to the desired final value.

163. Apparatus according to claim 158, wherein the circuitry is adapted to: (a) determine, responsive to the first signal, a current respiration rate of the user, (b) determine a desired final respiration rate, and (c) generate the output signal so as to direct the user to vary the user's respiration rate from the current value thereof, through one or more intermediate values thereof, to the desired final value.

164. Apparatus according to claim 163, wherein the circuitry is adapted to: (a) determine, responsive to the first signal,

a current value of an Expiratory : Inspiratory (E:I) ratio of the user, (b) determine a desired final value of the E:I ratio, and (c) generate the output signal so as to direct the user to vary the user's E:I ratio from the current value thereof, through one or more intermediate values thereof, to the desired final value, at generally the same time as directing the user to vary the respiration rate.

165. Apparatus for facilitating improving health of a user, comprising a stimulator, which is adapted to stimulate a portion of a body of the user at a stimulation rate between about 0.05 Hz and 0.15 Hz.

166. Apparatus according to claim 165, wherein the stimulator comprises a pressure applicator, adapted to apply mechanical pressure, which varies at the stimulation rate, to the portion of the body.

167. Apparatus according to claim 165, wherein the stimulator comprises an electrode, adapted to apply electrical energy, which varies at the stimulation rate, to the portion of the body.

168. Apparatus according to claim 165, wherein the stimulator comprises a magnetic field generator, adapted to apply a magnetic field, which varies at the stimulation rate, to the portion of the body.

169. Apparatus according to claim 165, wherein the stimulator comprises a temperature-modifying unit, adapted to apply at the stimulation rate to the portion of the body at least one of: heating and cooling.

170. Apparatus according to claim 165, wherein the stimulator comprises an electromagnetic radiation emitter, adapted to apply electromagnetic radiation, which varies at the stimulation rate, to the portion of the body.

171. Apparatus for facilitating improving health of a user, comprising:

a sensor, adapted to measure a physiological variable of the user and to generate a sensor signal responsive thereto;

a processor, adapted to receive the sensor signal and to determine, responsive thereto, a frequency of variation of a cardiovascular variable of the user that lies between about 0.05 Hz and 0.15 Hz; and

a stimulator, adapted to stimulate the user at the determined frequency.

172. Apparatus according to claim 171, wherein the sensor includes a first sensor, wherein the apparatus comprises a second sensor, adapted to measure a second physiological variable and to convey to the processor a second sensor signal responsive thereto, and wherein the processor is adapted to drive the stimulator to stimulate the user so as to obtain a desired value of the second sensor signal.

173. Apparatus according to claim 171, wherein the stimulator comprises a pressure applicator, adapted to apply to the user mechanical pressure, which varies at the determined frequency.

174. Apparatus for facilitating improving health of a user, comprising:

a sensor, adapted to measure a physiological variable of the user and to generate a sensor signal responsive thereto; and

circuitry, adapted to receive the sensor signal and to generate responsive thereto, for presentation to the user, two or more acoustic signals which are configured so as to create a spatial sound effect.

175. Apparatus according to claim 174, wherein the circuitry is adapted to configure the acoustic signals so as to create a stereo sound effect.

176. Apparatus according to claim 174, wherein the circuitry is adapted to configure the acoustic signals so as to create a three-dimensional sound effect.

177. Apparatus according to claim 174, wherein the sensor includes a first sensor, adapted to measure a first physiological variable, which is indicative of a voluntary action of the user, wherein the apparatus comprises a second sensor, adapted to measure a second physiological variable, which is not entirely under the direct voluntary control of the user, and wherein the circuitry is adapted to respective first and second sensor signals from the first and second sensors and, responsive thereto, to generate the acoustic signals, so as to direct the user to modify a parameter of the voluntary action.

178. Apparatus according to claim 177, wherein the circuitry is adapted to generate the acoustic signals such that an aspect of the spatial effect, selected from the list consisting of: a vertical aspect and a horizontal aspect, corresponds to the parameter of the voluntary action.

179. Apparatus according to claim 178, wherein the circuitry is adapted to generate the acoustic signals such that (a) a first sound generated responsive thereto is perceived by the user as coming from a first location and corresponds to a direction to the user to exhale, and (b) a second sound generated responsive to the acoustic signals is perceived by the user as coming from a second location which is higher than the first location, the second sound corresponding to a direction to the user to inhale.

180. Apparatus according to claim 178, wherein the circuitry is adapted to generate the acoustic signals such that sounds generated responsive thereto, which are perceived by the user as coming from left and right sides of the user, correspond to

respective directions to the user to move respective left and right legs of the user.

181. Apparatus for measuring blood pressure of a user, comprising:

a blood pressure sensor, adapted to take first and second blood pressure measurements and to generate respective first and second blood pressure signals responsive to the measurements, a time period between the first and second measurements being less than about 30 minutes; and

a processor, adapted to receive the first and second blood pressure signals, to determine a discrepancy therebetween, and to automatically actuate the blood pressure sensor to take a third blood pressure measurement if the discrepancy is greater than a determined threshold.

182. Apparatus for measuring blood pressure of a user, comprising:

a blood pressure sensor, adapted to make n measurements of systolic blood pressure (S) and diastolic blood pressure (D) of the user, thereby defining a measurement set M having n elements $\{(S_1, D_1), (S_2, D_2), \ldots, (S_n, D_n)\}$,; and

a processor, adapted to process measurement set M, so as to determine a statistical relation among the elements of measurement set M, and adapted to assess, responsive to the relation, a test measurement of systolic and diastolic blood pressure, so as to determine whether to identify a test element (S_{test}, D_{test}), corresponding to the test measurement, as an outlier with respect to the elements of measurement set M.

183. Apparatus according to claim 182, wherein the processor is adapted to determine a regression among the elements of measurement set M.

184. Apparatus according to claim 183, wherein the processor is adapted to determine a linear regression among the elements of measurement set M.

185. Apparatus for measuring and modifying blood pressure of an ambulatory user outside of a healthcare facility, comprising:

a blood pressure sensor, adapted to make a plurality of measurements of the blood pressure of the ambulatory user during a time period spanning at least about a week, and to generate respective blood pressure signals responsive to each of the measurements;

an intervention unit, adapted to administer an intervention to the ambulatory user a plurality of times during the time period, so as to modify the user's blood pressure; and

a processor, adapted to receive the blood pressure signals from the sensor, analyze the signals, and automatically modify a parameter of the intervention responsive to analyzing the signals.

186. Apparatus according to claim 185, wherein the processor is adapted to (a) perform a statistical analysis on the signals, (b) identify one or more of the measurements as outliers with respect to the other measurements, and (c) automatically modify the parameter of the intervention responsive to measurements not identified as outliers.

187. Apparatus according to claim 185, wherein the processor is adapted to (a) calculate a regression based on a measurement set of systolic and diastolic blood pressure measurements (S_i, D_i), (b) identify as outliers one or more of the measurements in the measurement set responsive to calculating the regression, and (c) automatically modify the

parameter of the intervention responsive to measurements not identified as outliers.

188. Apparatus for measuring and modifying a physiological variable of an ambulatory user outside of a healthcare facility, comprising:

a photoplethysmographic (PPG) sensor, adapted to make a plurality of measurements of the ambulatory user during a time period spanning at least about a week, and to generate respective PPG signals responsive to each of the measurements;

an intervention unit, adapted to administer an intervention to the ambulatory user a plurality of times during the time period, so as to improve a future PPG measurement; and

a processor, adapted to receive the PPG signals from the sensor, analyze the signals, and automatically modify a parameter of the intervention responsive to analyzing the signals.

189. Apparatus for measuring mechanical deformation, comprising:

a housing;

a base electrode; and

a deformable electrode, mechanically coupled to the base electrode and to the housing, the base electrode and the deformable electrode defining a capacitor having capacitance, such that the capacitance is varied responsive to deformation of the deformable electrode.

190. Apparatus according to claim 189, wherein a portion of the base electrode is adapted to be at a substantially fixed distance from a portion of the deformable electrode.

191. Apparatus according to claim 189, wherein the deformable electrode is adapted to be coupled to a user, so as to deform responsive to respiration of user.

192. Apparatus according to claim 189, and comprising a member, mechanically coupled to the deformable electrode, such that movement of the member deforms the deformable electrode and varies the capacitance.

193. Apparatus according to claim 192, and comprising a belt, adapted to be placed around a torso of a user and to cause movement of the member responsive to a change in circumference of the torso.

194. Apparatus according to claim 192, wherein the member is adapted to be in physical contact with the deformable electrode.

195. Apparatus for facilitating improving health of a user, comprising:

a first sensor, adapted to measure a first physiological variable, which is indicative of an action of the user;

a second sensor, adapted to measure a second physiological variable, which is not entirely under the direct voluntary control of the user; and

circuitry, adapted to receive respective first and second sensor signals from the first and second sensors, and, responsive thereto, to generate an output signal which causes the user to modify, substantially unintentionally, a parameter of the action.

196. Apparatus according to claim 195, wherein the first sensor comprises a respiration sensor.

197. Apparatus according to claim 195, wherein the second sensor comprises a blood pressure sensor.

198. Apparatus according to claim 195, wherein the second sensor comprises a photoplethysmographic sensor.

199. Apparatus according to claim 195, wherein the circuitry is adapted to generate a musical signal which causes the user

to modify, substantially unintentionally, the parameter of the action.

200. Apparatus according to claim 195, wherein the circuitry is adapted to generate the output signal while the user sleeps.

201. Apparatus for generating music, comprising:

a sensor, adapted to receive a rhythm signal corresponding to a rhythm of a cyclic physiological activity of a user, the physiological activity having first and second activity phases thereof;

a processor, adapted to analyze the rhythm signal to determine a frequency thereof and to determine a new frequency responsive to a desired change of the frequency of the rhythm signal; and

circuitry, adapted to:

generate at the new frequency a music signal for presentation to the user, the music signal having first and second music phases thereof respectively corresponding to the first and second activity phases, a duration of each of the music phases expressible as being approximately equal to an integer multiple of a base duration, the integer multiple being less than or equal to four,

so as to direct the user to modify durations of the first and second activity phases responsive to the respective durations of the first and second music phases.

202. Apparatus according to claim 201, wherein the circuitry is adapted to generate the music signal such that the duration of one of the music phases is approximately equal to an integer multiple of the other one of the music phases.

203. Apparatus according to claim 201, wherein the sensor comprises a motion sensor, adapted to measure motion of the user selected from the list consisting of: walking, jogging, and running.

204. Apparatus according to claim 201, wherein the sensor comprises a respiration sensor, adapted to measure respiration of the user.

205. Apparatus according to claim 204, wherein the respiration sensor is adapted to measure an indication of a timing characteristic of inspiratory and expiratory phases of the respiration.

206. Apparatus according to claim 201, wherein the processor is adapted to determine the new frequency responsive to a vasomotor frequency of the user.

207. Apparatus according to claim 206, and comprising a cardiovascular sensor, adapted to measure a cardiovascular variable of the user, wherein the processor is adapted to determine the vasomotor frequency responsive to the cardiovascular variable.

208. Apparatus for generating music, comprising:

a sensor, adapted to receive a rhythm signal corresponding to a rhythm of a cyclic physiological activity of a user, the physiological activity having first and second activity phases thereof;

a processor, adapted to analyze the rhythm signal to determine a frequency thereof and to determine a new frequency responsive to a desired change of the frequency of the rhythm signal; and

circuitry, adapted to:

generate at the new frequency a music signal for presentation to the user, the music signal having first

and second music phases thereof respectively corresponding to the first and second activity phases, a duration of one of the music phases being approximately equal to an integer multiple of a duration of the other one of the music phases, so as to

direct the user to modify durations of the first and second activity phases responsive to the respective durations of the first and second music phases.

209. Apparatus according to claim 208, wherein the circuitry is adapted to generate the music signal so as to direct the user to attempt to perform the first and second activity phases of the physiological activity such that the respective durations thereof are substantially equal to the durations of the first and second music phases.

210. Apparatus according to claim 208, wherein the sensor comprises a respiration sensor adapted to measure respiration of the user.

211. Apparatus according to claim 208, wherein the processor is adapted to determine the new frequency responsive to a vasomotor frequency of the user.

212. Apparatus according to claim 211, and comprising a cardiovascular sensor, adapted to measure a cardiovascular variable of the user, wherein the processor is adapted to determine the vasomotor frequency responsive to the cardiovascular variable.

213. Apparatus for generating music, comprising:

a sensor, adapted to receive a rhythmic physiological pattern corresponding to a rhythm of a physiological activity of a user;

a processor, adapted to analyze the rhythmic physiological pattern to determine an actual activity pattern

thereof and to determine a new activity pattern responsive to a desired change of the actual activity pattern; and

circuitry, adapted to:

generate a music signal for presentation to the user, the music signal having two or more sets of notes, at least one of the sets of notes having a rhythmic characteristic corresponding to the new activity pattern, so as to

direct the user to modify the rhythm of the physiological activity responsive to the music signal.

214. Apparatus according to claim 213, wherein the circuitry is adapted to generate the music signal so as to direct the user to modify the rhythm of the physiological activity to correspond to the rhythmic characteristic.

215. Apparatus according to claim 213, wherein the circuitry is adapted to output a vocal message so as to direct the user to modify the rhythm of the physiological activity.

216. Apparatus according to claim 213, and comprising a motion sensor, adapted to receive a motion signal corresponding to an activity of the user selected from the list consisting of: walking, jogging, and running.

217. Apparatus according to claim 213, wherein the circuitry is adapted to vary a characteristic of the notes in one of the sets responsive to at least one of: the actual activity pattern and the new activity pattern.

218. Apparatus according to claim 217, wherein the circuitry is adapted to vary a characteristic of an envelope parameter of the notes.

219. Apparatus according to claim 213, wherein the circuitry is adapted to generate the signal in accordance with the Musical Instrument Digital Interface (MIDI) standard.

220. Apparatus according to claim 219, wherein the circuitry is adapted to generate the music signal such that at least two of the sets of notes are in distinct layers.

221. Apparatus according to claim 213, wherein the sensor comprises a respiration sensor which is adapted to measure respiration of the user.

222. Apparatus according to claim 221, wherein the respiration sensor is adapted to measure an indication of a timing characteristic of inspiratory and expiratory phases of the respiration.

223. Apparatus according to claim 213, wherein the processor is adapted to determine the new activity pattern responsive to a vasomotor frequency of the user.

224. Apparatus according to claim 223, and comprising a cardiovascular sensor, adapted to measure a cardiovascular variable of the user, wherein the processor is adapted to determine the vasomotor frequency responsive thereto.

225. Apparatus according to claim 213, wherein the circuitry is adapted to (a) substantially not output the notes in at least one of the sets when the new activity pattern is characterized by a first rate, and (b) output the notes in the at least one of the sets when the new activity pattern is characterized by a second rate, which is slower than the first rate.

226. Apparatus according to claim 225, wherein the circuitry is adapted to (a) substantially not output the notes in a second one of the sets when the new activity pattern is characterized by the second rate, and (b) output the notes in the second set when the new activity pattern is characterized by a third rate, which is slower than the second rate.

227. Apparatus according to claim 226, wherein the circuitry is adapted to substantially not output the notes in the at least one of the sets when the new activity pattern is characterized by the third rate.

228. Apparatus for generating music, comprising:

a sensor, adapted to receive a rhythm signal corresponding to a rhythm of a cyclic physiological activity of a user;

a processor, adapted to analyze the rhythm signal to determine a pattern thereof and to determine a new pattern responsive to a desired change of the pattern of the rhythm signal; and

circuitry, adapted to:

generate, responsive to the new pattern, a music signal for presentation to the user; and

determine, responsive to a characteristic of the new pattern, a set of music layers to include in the music signal, the layers having notes, such that the notes of one of the layers are played at a generally faster rate than the notes of another one of the layers, so as to

direct the user to modify the rhythm of the physiological activity responsive to the music signal.

229. Apparatus according to claim 228, wherein the processor is adapted to analyze the rhythm signal to determine a characteristic frequency thereof, and to determine a new frequency responsive to a desired change of the frequency of the rhythm signal.

230. Apparatus according to claim 228, and comprising a respiration sensor, adapted to measure respiration of the user.

231. A method for facilitating improving health of a user, comprising:

receiving a first physiological variable, which is indicative of a voluntary action of the user;

receiving a second physiological variable, which is not entirely under the direct voluntary control of the user;

generating an output signal, responsive to the first and second variables; and

directing the user to modify a parameter of the voluntary action responsive to the output signal.

232. A method according to claim 231, wherein directing the user comprises directing the user such that if the user modifies the parameter of the voluntary action responsive to the output signal, then the second physiological variable will be changed in a desired manner.

233. A method according to claim 231, and comprising:

identifying an aspect of the first sensor signal indicative of the user having modified the parameter to a desired extent; and

responsive to identifying the aspect of the first sensor signal, generating a new output signal and directing the user to further modify the parameter of the voluntary action, responsive to the new output signal.

234. A method according to claim 231, wherein generating the output signal comprises generating the output signal so as to facilitate an improvement in congestive heart failure of the user.

235. A method according to claim 231, wherein generating the output signal comprises generating the output signal so as to facilitate an improvement of a blood pressure disorder of the user.

236. A method according to claim 231, wherein generating the output signal comprises generating the output signal so as to facilitate an improvement in asthma of the user.

237. A method according to claim 231, wherein generating the output signal comprises generating the output signal so as to facilitate an improvement in cystic fibrosis of the user.

238. A method according to claim 231, wherein generating the output signal comprises generating the output signal so as to facilitate an increase in mechanical compliance of arteries of the user.

239. A method according to claim 231, wherein generating the output signal comprises generating the output signal so as to facilitate an increase in oxygenation of tissue of the user.

240. A method according to claim 231, wherein generating the output signal comprises generating the output signal so as to facilitate weaning the user from a mechanical ventilator.

241. A method according to claim 231, wherein generating the output signal comprises generating the output signal so as to facilitate reducing a duration of a post-surgery recover period of the user.

242. A method according to claim 231, wherein generating the output signal comprises generating a music signal.

243. A method according to claim 231, wherein generating the output signal comprises outputting natural sounds.

244. A method according to claim 231, generating the output signal comprises displaying one or more patterns on a screen.

245. A method according to claim 231, wherein receiving the second physiological variable comprises making a blood pressure measurement.

246. A method according to claim 231, wherein receiving the second physiological variable comprises making a photoplethysmographic measurement.

247. A method according to claim 231, wherein receiving the second physiological variable comprises measuring blood oximetry of the user.

248. A method according to claim 231, wherein receiving the second physiological variable comprises making an electrocardiographic measurement.

249. A method according to claim 231, wherein receiving the second physiological variable comprises making an electroencephalographic measurement.

250. A method according to claim 231, wherein receiving the second physiological variable comprises measuring a heart rate of the user.

251. A method according to claim 231, wherein receiving the second physiological variable comprises receiving the second physiological variable so as to facilitate a determination of a characteristic of peristalsis of the user.

252. A method according to claim 231, wherein receiving the second physiological variable comprises receiving the second physiological variable so as to facilitate a determination of arterial compliance of the user.

253. A method according to claim 231, wherein receiving the second physiological variable comprises receiving the second physiological variable so as to facilitate a determination of pulse wave velocity of blood in blood vessels of the user.

254. A method according to claim 231, wherein receiving the second physiological variable comprises receiving the second

physiological variable so as to facilitate a determination of a vasomotor frequency of the user.

255. A method according to claim 254, wherein generating the output signal comprises setting a frequency of the output signal responsive to the vasomotor frequency.

256. A method according to claim 231, wherein receiving the first physiological variable comprises receiving an indication of motion of the user.

257. A method according to claim 256, wherein receiving the indication of motion of the user comprises receiving an indication of motion of a limb of the user.

258. A method according to claim 231, wherein receiving the first physiological variable comprises receiving a cyclic physiological variable of the user, wherein generating the output signal comprises generating the output signal responsive to a desired change in a frequency of the cyclic physiological variable.

259. A method according to claim 231, wherein receiving the first physiological variable comprises measuring respiration of the user.

260. A method according to claim 259, wherein measuring the respiration comprises measuring a characteristic of the user's respiration and determining, responsive thereto, an indication of airway resistance of the user.

261. A method according to claim 259, wherein measuring the respiration comprises measuring a characteristic of the user's respiration and determining, responsive thereto, a mechanical load against which the user breathes.

262. A method according to claim 259, wherein generating the output signal comprises:

determining, responsive to the first physiological variable, a current value of an Expiratory : Inspiratory (E:I) ratio of the user;

determining a desired final value of the E:I ratio; and

generating the output signal so as to direct the user to vary the user's E:I ratio from the current value thereof, through one or more intermediate values thereof, to the desired final value.

263. A method according to claim 259, wherein generating the output signal comprises:

determining, responsive to the first physiological variable, a current respiration rate of the user;

determining a desired final respiration rate; and

generating the output signal so as to direct the user to vary the user's respiration rate from the current value thereof, through one or more intermediate values thereof, to the desired final value.

264. A method according to claim 263, wherein generating the output signal comprises:

determining, responsive to the first physiological variable, a current value of an Expiratory : Inspiratory (E:I) ratio of the user,

determining a desired final value of the E:I ratio; and

generating the output signal so as to direct the user to vary the user's E:I ratio from the current value thereof, through one or more intermediate values thereof, to the desired final value, at generally the same time as directing the user to vary the respiration rate.

265. A method for facilitating improving health of a user, comprising stimulating a portion of a body of the user at a stimulation rate between about 0.05 Hz and 0.15 Hz.

266. A method according to claim 265, wherein stimulating comprises applying pressure, which varies at the stimulation rate, to the portion of the body.

267. A method according to claim 265, wherein stimulating comprises applying electrical energy, which varies at the stimulation rate, to the portion of the body.

268. A method according to claim 265, wherein stimulating comprises applying a magnetic field, which varies at the stimulation rate, to the portion of the body.

269. A method according to claim 265, wherein stimulating comprises applying at the stimulation rate to the portion of the body at least one of: heating and cooling.

270. A method according to claim 265, wherein stimulating comprises applying electromagnetic radiation, which varies at the stimulation rate, to the portion of the body.

271. A method for facilitating improving health of a user, comprising:

measuring a physiological variable of the user; and

determining, responsive to measuring, a frequency of variation of a cardiovascular variable of the user that lies between about 0.05 Hz and 0.15 Hz; and

stimulating the user at the determined frequency.

272. A method according to claim 271, wherein measuring comprises measuring a first physiological variable, wherein the method comprises measuring a second physiological variable, and wherein stimulating the user comprises stimulating so as to obtain a desired value of the second sensor signal.

273. A method according to claim 271, wherein stimulating comprises applying to the user mechanical pressure, which varies at the determined frequency.

274. A method for facilitating improving health of a user, comprising:

measuring a physiological variable of the user; and

generating, responsive thereto, for presentation to the user, two or more acoustic signals which are configured so as to create a spatial sound effect.

275. A method according to claim 274, wherein the generating comprises configuring the acoustic signals so as to create a stereo sound effect.

276. A method according to claim 274, wherein generating comprises configuring the acoustic signals so as to create a three-dimensional sound effect.

277. A method according to claim 274, wherein measuring the physiological variable comprises measuring a first physiological variable, which is indicative of a voluntary action of the user, wherein the method comprises measuring a second physiological variable, which is not entirely under the direct voluntary control of the user, and wherein generating the acoustic signals comprises generating the acoustic signals so as to direct the user to modify a parameter of the voluntary action.

278. A method according to claim 277, wherein generating the acoustic signals comprises generating the acoustic signals such that an aspect of the spatial effect, selected from the list consisting of: a vertical aspect and a horizontal aspect, corresponds to the parameter of the voluntary action.

279. A method according to claim 278, wherein generating the acoustic signals comprises generating the acoustic signals such that (a) a first sound generated responsive thereto is perceived by the user as coming from a first location, and corresponds to a direction to the user to exhale, and (b) a

second sound generated responsive to the acoustic signals is perceived by the user as coming from a second location which is higher than the first location, the second sound corresponding to a direction to the user to inhale.

280. A method according to claim 278, wherein generating the acoustic signals comprises generating the acoustic signals such that sounds generated responsive thereto, which are perceived by the user as coming from left and right sides of the user, correspond to respective directions to the user to move respective left and right legs of the user.

281. A method for measuring blood pressure of a user, comprising:

making first and second blood pressure measurements, a time period between the first and second measurements being less than about 30 minutes;

determining a discrepancy between the first and second measurements; and

automatically making a third blood pressure measurement if the discrepancy is greater than a determined threshold.

282. A method for measuring blood pressure of a user, comprising:

making n measurements of systolic blood pressure (S) and diastolic blood pressure (D) of the user, thereby defining a measurement set M having n elements $\{(S_1, D_1), (S_2, D_2), \ldots, (S_n, D_n)\}$; and

processing measurement set M, so as to determine a statistical relation among the elements of measurement set M;

assessing, responsive to the relation, a test measurement of systolic and diastolic blood pressure; and

determining, responsive to assessing, whether to identify a test element (S_{test}, D_{test}), corresponding to the test

measurement, as an outlier with respect to the elements of measurement set M.

283. A method according to claim 282, wherein processing comprises determining a regression among the elements of measurement set M.

284. A method according to claim 283, wherein determining the regression comprises determining a linear regression among the elements of measurement set M.

285. A method for measuring and modifying blood pressure of an ambulatory user outside of a healthcare facility, comprising:

making a plurality of measurements of the blood pressure of the ambulatory user during a time period spanning at least about a week;

administering an intervention to the ambulatory user a plurality of times during the time period, so as to modify the user's blood pressure; and

analyzing the measurements; and

automatically modifying a parameter of the intervention responsive to analyzing the signals.

286. A method according to claim 285, wherein analyzing comprises:

performing a statistical analysis on the measurements;

identifying one or more of the measurements as outliers with respect to the other measurements; and

automatically modifying the parameter of the intervention responsive to measurements not identified as outliers.

287. A method according to claim 285, wherein analyzing comprises:

calculating a regression based on a measurement set of systolic and diastolic blood pressure measurements (S_i, D_i);

identifying as outliers one or more of the measurements in the measurement set responsive to calculating the regression; and

automatically modifying the parameter of the intervention responsive to measurements not identified as outliers.

288. A method for measuring mechanical deformation, comprising mechanically coupling a base electrode to a deformable electrode, the base electrode and the deformable electrode defining a capacitor having capacitance, such that the capacitance is varied responsive to deformation of the deformable electrode.

289. A method for facilitating improving health of a user, comprising:

measuring a first physiological variable, which is indicative of an action of the user;

measuring a second physiological variable, which is not entirely under the direct voluntary control of the user; and

generating an output signal which causes the user to modify, substantially unintentionally, a parameter of the action.

290. A method according to claim 289, wherein measuring the first physiological variable comprises measuring respiration of the user.

291. A method according to claim 289, wherein measuring the second physiological variable comprises measuring blood pressure of the user.

292. A method according to claim 289, wherein measuring the second physiological variable comprises making a photoplethysmographic measurement.

293. A method according to claim 289, and comprising generating a musical signal which causes the user to modify, substantially unintentionally, the parameter of the action.

294. A method according to claim 289, and comprising generating the output signal while the user sleeps.